



RECEIVED  
CENTRAL FAX CENTER  
MAY 12 2008

**FACSIMILE TRANSMISSION**

DATE: MAY 12, 2008

PAGE 1 OF: 37

TO: USPTO

FACSIMILE NO.: (571) 273-8300

FROM: GARY P. OAKESON

TRANSMITTED BY: BRENDA WISEMAN

OUR DOCKET NO.: 200315570-1

FOR: PIGMENTED INK-JET INKS WITH IMPROVED PRINT QUALITY AND  
RELIABILITY

SUBJECT: APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

Attached please find an Appeal Brief under 37 C.F.R. § 41.37 for Docket No.  
200315570-1, Application No. 10/807,025.

Thank you. We await your confirmation of receipt.

Respectfully submitted,

Gary P. Oakeson  
THORPE NORTH & WESTERN, LLP  
Customer No. 20,551  
Reg. No. 44266

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, and have therefore been sent or received this communication in error, you are asked not to disseminate or copy any of the attached and are to notify the sender immediately by telephone. Please also return the original message to the sender by mail. Thank you.

[www.tnw.com](http://www.tnw.com)

2140 South 700 East • Suite 200 • Sandy, Utah 84070-0662 • 801.566.6633 • 1.801.566.0750 • [patlaw@tnw.com](mailto:patlaw@tnw.com) U.S. Mailing Address: PO. Box 1219 • Sandy, Utah 84091-1219

"The Team Approach to Premier Performance"

MAY-12-08 MON 12:42 PM

FAX NO.

RECEIVED<sup>02</sup>  
CENTRAL FAX CENTER  
MAY 12 2008

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 200315570-1

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Zia Ur Rehman  
Application No.: 10/807,026  
Filing Date: 03/22/2004

Confirmation No.: 2239  
Examiner: Edward J. Cain  
Group Art Unit: 1796

Title: Pigmented Ink-Jet Inks With Improved Print Quality and Reliability

Mail Stop Appeal Brief-Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on May 2, 2008.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☒ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☒ 1st Month  
\$120

☐ 2nd Month  
\$450

☐ 3rd Month  
\$1020

☐ 4th Month  
\$1590

☐ The extension fee has already been filed in this application.

☐ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$ 620. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

☒ A duplicate copy of this transmittal letter is enclosed.

☐ I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:  
Commissioner for Patents, Alexandria, VA 22313-1450  
Date of Deposit:

OR

☒ I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number (571)273-8300.

Date of facsimile: 05/12/2008

Typed Name: Brenda Wiseman

Signature: Brenda Wiseman

Respectfully submitted,

Zia Ur Rehman

By: Gary J. Oakeson

Gary J. Oakeson

Attorney/Agent for Applicant(s)

Reg No.: 44266

Date: 05/12/2008

Telephone: (801) 566-6633

Rev 10/04 (Apl/Brief)

APPEAL BRIEF  
Docket No. 200315570-1

1

RECEIVED  
CENTRAL FAX CENTER  
MAY 12 2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPELLANT:	Zia Ur Rehman	<b>CERTIFICATE OF DEPOSIT UNDER 37 C.F.R. § 1.8</b>  I hereby certify that this correspondence is being transmitted via facsimile to the USPTO or being deposited with the United States Postal Service with sufficient postage as first class postage in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.  <u>5/12/08</u> Date of Deposit  <u>Brenda Wiseman</u> Brenda Wiseman
SERIAL NO.:	10/807,025	
FILING DATE:	3/22/2004	
CONF. NO.:	2239	
FOR:	PIGMENTED INK-JET INKS WITH IMPROVED PRINT QUALITY AND RELIABILITY	
ART UNIT:	1796	
EXAMINER:	Edward J. Cain	
DOCKET NO.:	200315570-1	

APPELLANTS' APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Mail Stop Appeal Brief - Patents

Sir:

Appellants submit this Appeal Brief in connection with their appeal from the final rejection of the Patent Office, mailed January 15, 2008, in the above-identified application. A Notice of Appeal was filed on May 2, 2008, which was received by the Board of Appeals on May 2, 2008.

APPEAL BRIEF  
Docket No. 200315570-1

2

RECEIVED  
CENTRAL FAX CENTER

MAY 12 2008

TABLE OF CONTENTS

TABLE OF CONTENTS	2
I. REAL PARTY IN INTEREST	3
II. RELATED APPEALS AND INTERFERENCES	4
III. STATUS OF CLAIMS	5
IV. STATUS OF AMENDMENTS	6
V. SUMMARY OF CLAIMED SUBJECT MATTER	7
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	10
VII. ARGUMENT	12
A. APPELLANTS' INVENTION	12
B. THE ASSERTED REFERENCES	12
1. <i>The Wang Reference and the Belmont Reference</i>	12
2. <i>The Parazak Reference</i>	12
3. <i>The Zhu Reference</i>	13
4. <i>The Suzuki Reference</i>	13
C. REJECTIONS UNDER 35 U.S.C. § 102(e)	14
1. <i>Requirements for Prima Facie Anticipation</i>	14
2. <i>Rejections to Claims 21-26 and 28-29</i>	15
D. REJECTIONS UNDER 35 U.S.C. § 103(A)	19
1. <i>Requirements for Prima Facie obviousness</i>	19
2. <i>The Rejection of Claims 1-6, 8-9, and 11-19</i>	21
3. <i>The Rejection of Claims 21-26 and 28-29</i>	26
E. CONCLUSION	27
VIII. CLAIMS APPENDIX	29
IX. EVIDENCE APPENDIX	33
X. RELATED PROCEEDINGS APPENDIX	34

RECEIVED  
CENTRAL FAX CENTER

MAY 12 2008

APPEAL BRIEF  
Docket No. 200315570-1

3

I. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

APPEAL BRIEF  
Docket No. 200315570-1

4

II. RELATED APPEALS AND INTERFERENCES

Appellants and Appellants' legal representatives know of no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

APPEAL BRIEF  
Docket No. 200315570-1

5

III. STATUS OF CLAIMS

Claims 1-6, 8-9, 11-19, 21-26, and 28-29 remain pending and have been rejected.

Claims 7, 10, 20, 27, and 30 have been canceled. The claims on appeal in this application are claims 1-6, 8-9, 11-19, 21-26, and 28-29.

APPEAL BRIEF  
Docket No. 200315570-1

6

IV. STATUS OF AMENDMENTS

An amendment to claims 1, 11, and 21 was submitted by Appellants on March 14, 2008 after the Final Office Action mailed on January 15, 2008. The amendment was entered by the Examiner.



APPEAL BRIEF  
Docket No. 200315570-1

7

V. SUMMARY OF CLAIMED SUBJECT MATTER

1. A system for printing images on a substrate, comprising (page 3, lines 6-7; page 6, lines 12-13):

a) an ink-jet ink including (page 3, lines 7-8; page 6, line 13):

- i) a liquid vehicle including water, and from 5 wt% to 35 wt% total organic solvent content (page 3, lines 10-11; page 6, lines 16-17), wherein the organic solvent content includes at least three of 1,5-pentanediol, ethoxylated glycerol, 2-pyrrolidinone, and 2-methyl-1,3-propanediol (page 16, lines 7-9; page 18, Table 1);
- ii) from 0.1 wt% to 6 wt% of acid-functionalized pigment solids (page 3, lines 8-9; page 6, lines 14-15);
- iii) from 0.001 wt% to 6 wt% of styrene-maleic anhydride copolymer (page 3, lines 9-10; page 6, lines 15-16), said styrene-maleic anhydride copolymer having a weight average molecular weight from about 400 Mw to 15,000 Mw (page 3, lines 11-13; page 6, lines 17-19).

b) a printhead loaded with the ink-jet ink (page 3, line 7; page 6, lines 13-14) and configured for jetting the ink-jet ink at a firing frequency from 12 kHz to 25 kHz (page 7, lines 27-29), and wherein the frequency response range for the ink-jet ink is such that the ink-jet ink is jettable at from 3 kHz to 25 kHz (page 7, line 30 – page 8, line 1).

11. A method of rapidly printing an ink-jet image (page 3, line 14; page 6, line 20), comprising ink-jetting an ink-jet ink onto a media substrate at a firing frequency

## APPEAL BRIEF

Docket No. 200315570-1

8

from 12 kHz to 25 kHz (page 3, lines 15-16; page 6, lines 21-22), said ink-jet ink comprising (page 3, line 16; page 6, line 22):

- a) a liquid vehicle including water, and from 5 wt% to 35 wt% total organic solvent content (page 3, lines 18-19; page 6, lines 24-25), wherein the organic solvent content includes at least three of 1,5-pentanediol, ethoxylated glycerol, 2-pyrrolidinone, and 2-methyl-1,3-propanediol (page 16, lines 7-9; page 18, Table 1);
- b) from 0.01 wt% to 6 wt% of acid-functionalized pigment solids (page 3, lines 16-17; page 6, lines 22-23);
- c) from 0.001 wt% to 6 wt% of styrene-maleic anhydride copolymer (page 3, lines 17-18; page 6, lines 23-24), said styrene-maleic anhydride copolymer having a weight average molecular weight from about 400 Mw to 15,000 Mw (page 3, lines 19-21; page 6, lines 25-27),

wherein the frequency response range for the ink-jet ink is such that the ink-jet ink is jettable at from 3 kHz to 25 kHz (page 7, line 30 – page 8, line 1).

21. An ink-jet ink composition, comprising (page 3, line 22; page 6, line 28):

- a) a liquid vehicle having from 5 wt% to 35 wt% of total organic solvent content (page 3, lines 24-26; page 6, line 31 – page 7, line 1), wherein the organic solvent content includes at least three of 1,2-pentanediol, ethoxylated glycerol, 2-pyrrolidinone, and 2-methyl-1,3-propanediol (page 16, lines 7-9; page 18, Table 1);
- b) from 0.1 wt% to 6 wt% of acid-functionalized pigment solids (page 3, line 23; page 6, line 29);

## APPEAL BRIEF

Docket No. 200315570-1

9

c) from 0.001 wt% to 6 wt% of styrene-maleic anhydride copolymer (page 3, lines 23-24; page 6, lines 29-30), said styrene-maleic anhydride copolymer having a weight average molecular weight from about 400 Mw to 15,000 Mw (page 3, lines 26-27; page 7, lines 1-2); wherein the ink-jet ink composition is reliably jettable at all firing frequencies ranging from 3 kHz to 25 kHz (page 7, line 30 -- page 8, line 1).